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Paradox Lost: Disappearing Female Job Satisfaction

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Paradox Lost: Disappearing Female Job

Satisfaction

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Abstract

The greater job satisfaction reported by female workers represents a puzzle given, on average, their worse labour market outcomes. Using the original data source of Clark (1997), we show that over the last two decades the female satisfaction gap has largely vanished. This reflects a strong secular decline in female job satisfaction. This decline happened for younger women in the 1990s as they aged and because of new female workers in more recent years that have lower job satisfaction than their early 1990s peers. Decompositions make clear that the decline does not reflect deteriorating job characteristics for women but rather their increasingly harsh evaluation of jobs characteristics. These findings fit with the suggestion that women in the early 1990s had a gap between their labour market expectations and actual experience that has since closed and that the gender satisfaction gap has vanished as a consequence.

Keywords: Job Satisfaction; Gender; Expectations

JEL CODES: J16; J28

1. Introduction

Self-reported wellbeing provides insight into life events and, in the case of job satisfaction, the utility workers receive from the sum of all aspects of a given job (Hamermesh 2001). This has led to an increase in our understanding of how workers respond to variations in job and contractual conditions such as job security, temporary employment and performance related pay (Clark 2001, Booth et al 2002, Green and Heywood 2008). At the same time, two so-called paradoxes have attracted enormous attention from researchers examining job satisfaction. Unionised workers who gain improved pay and benefits report lower job satisfaction (Hamermesh 1977, Freeman 1978, Borjas 1979) while female workers with apparently worse labour market outcomes report higher job satisfaction (Clark, 1997). At best these represent puzzles worthy of investigation. At worst they pose questions regarding the value of job satisfaction as a metric of worker utility with the job. The effect of unions on job satisfaction continues to generate research, with much of it aimed at exploring the empirical robustness of the union-job satisfaction relationship (Bryson et al. 2010, Powdthavee 2011, Artz 2012 and Green and Heywood 2015). The literature on female satisfaction has essentially taken as given the so-called 'paradox of the contented female worker' and seeks explanations for its existence (Sloane and Williams 2000, Bender et al. 2005, Kristensen and Johansson 2008, Kifle et al, 2014; Mumford and Smith 2015). As Carleton and Clain (2012 p. 331) put it "the common approach to the issue has been to search for some previous overlooked factor, that once included in the analysis, causes the gender difference to disappear."

This paper revisits the paradox of the contented female, returning to the original specification and data source used by Clark (1997) and estimates the trajectory of female job satisfaction over the two decades since that seminal paper.[1] We initially confirm the original

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[1] Indeed, Google Scholar lists over one thousand cites to Clark (1997).

female job satisfaction premium highlighted by Clark in the early 1990s using the British Household Panel Survey (BHPS). Yet, rather than offer a new explanation for its existence, we demonstrate that the premium has now essentially disappeared as a result of a sharp decline in female job satisfaction over the intervening years. At a minimum the idea of contented female workers should no longer be taken for granted and, as a consequence, searching for explanations for a gap may be less relevant. Beyond documenting this fact, we examine a range of explanations for the decline in female job satisfaction including changes in working conditions for women and the changing pattern of rewards to males and females. We also explore both vintage and cohort effects.

In the end our evidence roughly supports Clark's original prediction. He argued that the paradox of the contented female worker resulted from women's improved position in the labour force relative to their expectations. He came to this conclusion by first supposing that expectations were closer to reality for younger and more educated workers and then showing that there was little or no satisfaction gap for the youngest and most educated workers in his sample (a finding confirmed by Donohue and Heywood 2004 for the US). This led him to predict that the contented female worker would be a temporary phenomenon and that over time expectations would adjust to match reality. Once that match happened, the paradox would be resolved.

Our evidence shows a decline in the raw gender satisfaction gap and a decline in the unexplained gender gap to essentially zero. Overall, there appears to be a decline in female job satisfaction within cohort over time and evidence that new cohorts enter with lower satisfaction than exiting cohorts. Moreover, the decline has been more marked for older workers. Decompositions of female job satisfaction over time indicate that none of the decline is due to a worsening of job or individual characteristics. Instead, the decline comes entirely from harsher evaluation of characteristics by women. Thus, if current women

workers faced the job characteristics prevalent for the women in Clark's sample of the early 1990s, they would report lower job satisfaction than observed by Clark at that time. This seems to concord with the view that women have expectations about the labour force that increasingly reflect actual experience, that are closer to those of men, and that the paradox is disappearing.

We are not the first to note a decline in female job satisfaction in the BHPS. Sousa-Poza and Sousa-Poza (2003) captured a period of decline in late 1990s but showed that a female premium remained even after this drop. Our results reveal a period of stabilization in the early 2000s but then a continuation of the downward trend such that the advantage for women has essentially vanished. We emphasize that our evidence uses Clark's original data source and so is unique to the UK. While the paradox of the contented female worker has not been unique to the UK, there has been evidence that it has been most evident in Anglo-Saxon countries (Sousa-Poza and Sousa-Poza 2000). Thus, we are careful not to claim that the trend we identify extends beyond the UK.

2. Data and Preliminary Evidence:

The data used in this paper are drawn from the BHPS and its subsequent expansion Understanding Society (US). The BHPS is a nationally representative sample that each year interviews approximately 10,000 individuals from roughly 5,500 households. We use the waves of the BHPS corresponding to 1991-2008, after which the BHPS was discontinued and replaced with US. The coding of US allows us to follow the participants from the BHPS for every year to 2012 with the exception of wave 1 of the US starting 2009.[2]

Respondents to the BHPS and US answer a variety of job satisfaction questions, some of which have changed over the time of the survey. All job satisfaction questions in the

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[2] The original BHPS participants were not initially asked to participate in US and hence are missing from wave 1. They were subsequently invited to join US and entered in wave 2.

BHPS are reported on a 7 value Likert scale, 1 being the least satisfied, 7 the most satisfied. Five job satisfaction questions are available over the entire panel. These are overall job satisfaction, satisfaction with pay, satisfaction with hours worked, satisfaction with job security, and satisfaction with the work itself. While the primary focus is on the overall job satisfaction, subsequent examination of the sub-domains of job satisfaction is instructive insofar as they convey information regarding the sources of any gender differences. We restrict our sample to those individuals aged 16 to 64 (to 60 for women, following Clark 1997) and exclude those with missing data. This yields an unbalanced panel of 22,328 individuals. We broadly match the controls of Clark although a few changes of definitions over time force a modest deviation in specification.[3] As will be seen, we remain able to essentially reproduce Clark's 1991 point estimates. The full list of control variables and descriptive statistics are in Appendix A1.

Figure 1 presents the mean level of overall job satisfaction on the 7 point scale for men and women over the years from 1991 to 2012. The observations in 2010, 2011 and 2012 include the full set of BHPS respondents who formed the basis of the larger US sample. The pattern for men shows remarkably little change with nearly all the observations, including the earliest and most recent, within a narrow band between 5.2 and 5.3 satisfaction points. The change for women has been dramatic with high values in the early years of 5.7 declining over the 1990s and then in the later 2000s. Indeed, the last two observations have means for women in the 5.2 to 5.3 range that is common for men.[4] This dramatic narrowing of the gap motivates our more detailed estimates.

<Figure 1 about here>

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[3]For example, prior to 1999, flexible contracts were aggregated not allowing variations within sub-groups of flexible contracts. For instance fixed term contracts and agency workers were grouped together.
[4] We emphasize that in all cases the patterns we report and our main results are largely unaffected if (a) our analysis stopped in 2008; or (b) we chose to include the full US samples (i.e. including the non-BHPS households).

<Table 1>

Table 1 documents the well-known gender gap in overall job satisfaction as it existed in the early 1990s. For the sake of easy comparison to Clark's main results we report average effects from ordered probits. Column 1 displays the raw differential from a simple regression on gender in 1991 to be 0.305 satisfaction points. We then include the full set of individual and job characteristics as controls. As expected, these decrease the gender gap, but not hugely. The resulting gap of 0.234 matches very closely to Clark's estimate of 0.240. Having established an approximate replication of Clark's results, we now take the same specification to 2008, the last year of the original BHPS. The estimate in column 3 indicates a raw differential of 0.162. Even more dramatic is the drop by nearly 60 percent in the unexplained gender differential in column 4 to a value of 0.1. Finally, we move to 2012, the end of the sample period and last wave of US. The raw gender differential in column 5 has dropped to 0.023 and is insignificantly different from zero. The unexplained differential is 0.009, essentially zero. There appears to be no paradox. Men and women have roughly similar job satisfaction holding characteristics constant.

<Figure 2 >

Figure 2 presents the full times series of point estimates on the unexplained conditional gender differential. While subject to fairly large variation, it shows differentials in the early years of .2 to .3 that shrink over the 1990s, partially recover but then shrink again from the late 2000s on. Indeed, none of the estimates from 2008 to 2012 are significantly different from zero at the 5 percent level as shown by the lower confidence bound. This largely mirrors the dynamics seen in the raw differential in Table 1.

<Table 2 >

Table 2 shows that the patterns reported in Table 1 are broadly true across all domains of job satisfaction. The table provides analogous estimates for the four dimensions of job satisfaction that are consistently measured across the BHPS.[5] In the case of job satisfaction with pay, security and the 'work itself' there is a male-female gap in job satisfaction initially. As with overall job satisfaction, these gaps tend to disappear during by the end of our time series. In the case of satisfaction with hours worked there is initially no difference across genders. Yet, by the end of the time series, there is weak evidence that female workers are less happy with their hours than are men. We now turn to further exploration of downward trend in female job satisfaction and, critically, what drives it.

3. Exploring the Trend and its Causes

<Table 3>

Table 3 seeks to examine the dynamics of how the gap has changed over time. As an initial step we include a yearly time trend along with an interaction between this and gender. These are included into a multi-year specification that simply pools the data, estimated by ordered probit with the standard errors clustered by individual.[6] The male time trend (Year) is negative but very small over the period, while female job satisfaction trends down at more than 3 times the male rate over the period. The difference in the rates is sufficient that projections indicate that the initial job satisfaction premium of a 0.254 for women is completely eliminated within the sample period and so is zero by 2012. This is reflected in the actual within year estimates that show no significant difference in male-female job satisfaction in the most recent years. The second column includes squared terms for the both the trend and the interaction. The squared terms have positive significant coefficients

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[5] These domains of job satisfaction are not reported in Understanding Society.

[6] In unreported results we also estimated these models by random-effects ordered probit and Mundlak's correlated random effects model. Doing so had no substantive effects on the tenor of our main estimates.

suggesting the decline is greater early in the time period with the substantially larger decline in female satisfaction in the linear term again generating a projection of no difference in satisfaction by the end of the period. Finally, not shown is a third variation that simply includes a dummy for each year after 1991 and an interaction of that dummy with the female indicator. Simple projections again indicate that by the end of the period, there is no difference in job satisfaction by gender. Thus, if we estimate a separate equation within each year as reflected in Figure 2, or a single specification across years as in Table 2, the pattern of decline to essentially zero remains evident.

<Table 4>

Table 4 examines one potential explanation for the dynamics documented in table 3 by examining the evolution of the gender satisfaction gap among workers over time. To examine this in Table 4 we report estimates where the sample is limited to those workers who are in the survey throughout the time series. By construction these workers are younger than average in 1991 as older workers will attrit out of the sample. By doing this we are effectively identifying the young in Clark's sample and following them over the time series of more than 20 years. Using the same specification as before, we find that a significant female satisfaction gap exists among these younger workers in 1991 estimates. The estimate is, however, only about 66 percent of the estimated gap on the entire 1991 sample from Table 1. This merely reproduces the observation by Clark that at that time there was a smaller gap among younger workers. We then re-estimate the identical specification on this cohort as it ages. In the last year of the BHPS, the point estimate has diminished markedly and is no longer statistically significant (column 2). Moreover, there is no significant satisfaction gap in the three years of the US for which we can follow the cohort. Thus, it seems clear that the 1991 sample "aged" out of a significant gender differential in satisfaction. Put differently, the cohort of younger women in 1991 reported decreasing job satisfaction as they aged.

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<Table 5>

Having established that the original Clark cohort of younger female workers has become relatively less satisfied over time we next ask what has happened to the job satisfaction of workers of different ages over our sample period. Table 5 reports estimates of gender job satisfaction gaps across the entire sample in the respective years simply dividing them by age. We arbitrarily take 35 as a cut-point but have experimented with other cut-points. Here, rather than following the cohort through the time series, we focus on vintage effects. The first two columns show that in 1991, among both the young and old, there exists a significant female satisfaction advantage but this advantage is greater for older workers.[7] By the last two years of the BHPS both point estimates are markedly reduced and there is no significant female advantage for either younger or older workers. In fact, the insignificant positive coefficient is actually larger for younger workers. By the last year of the US, both young and old workers show a vanishingly small point estimate that is very far from statistical significance. This revealing result suggests that while the 1991 cohort aged out of a gender gap, the young workers of 2012 never had one! This fits with Clark's view that the accumulating experience of women in the labour force generates expectations that more closely match reality and those of men.

4. Decomposing the Trend

We now retain the central measure of overall job satisfaction explore differences in the determinants of job satisfaction by gender and how those differences have changed. Our initial step is to estimate separate equations for male and female job satisfaction. We apply a

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[7] Indeed, in estimates available from the authors, including an interaction of age and gender in a 1991 full sample estimate reveals that the female satisfaction gap increases significantly with age.

standard Oaxaca-Blinder decomposition by estimating these equations by OLS[8]. We stress that these linear estimates match the patterns evident in the ordered probit, and are reported in full in Appendix Table A2. We adopt the approach outlined by Oaxaca and Ransom (1994) to choose the appropriate weighting matrix for the decomposition but note that the basic results remain if we use more extreme options such as assuming either male or female coefficients are the true 'prices'.

<Table 6>

Table 6 summarises the results of the decomposition exercise. Focusing on the changes over time is the most instructive. In 1991 there was a difference in favour of women of 0.401 on the 1-7 job satisfaction scale. The decomposition demonstrates that this is more than entirely reflected differences in coefficients. The difference in perception by females of given characteristics explains their job satisfaction premium. In fact, on average, female workers had average characteristics associated with worse job satisfaction than their male counterparts. This fits with the view that female workers in 1991 had lower expectations than their male counterparts and were simply more satisfied with a given set of working characteristics because of these lower expectations.

By 2008 the gap in job satisfaction had more than halved. This reflects two countervailing influences. First, there is a marked reduction in the magnitude of the coefficient effect (the perception of women was becoming more similar to that of men). Second, the job and personal characteristics of women improved relative to men. This suggests that if female characteristics, in terms of generating job satisfaction, had not improved in the period between 1991 to 2008 we would have witnessed an even more marked reduction in the raw female to male job satisfaction gap.

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[8] In unreported estimates we also estimated our models via POLS as per (Ferrer-i-Carbonell and Frijters, 2004) and the tenor of the subsequent decomposition is essentially unchanged.

Finally, we conduct the same exercise using the last wave of US. By this point there is essentially no gender gap in job satisfaction. This reflects a continuation of the same two influences. Female characteristics continued to improve but this was balanced by worse coefficients, a more harsh judgement of those characteristics. Together these estimates indicate that the reduction in female job satisfaction across the past 2 decades reflect a dramatic downward re-adjustment of female expectations, one which has left women relatively less satisfied with given working characteristics and conditions.

Table 7 presents decomposition results for individual covariates with the aim of exploring which were associated with the most marked changes in female-male job satisfaction over time. For clarity, we report only 1991 and 2012 as this provides the sharpest point of comparison. This reveals the large movements in the coefficient effects for age and having dependent children. The decline in age effects is consistent with the notion that the views of females of different ages with regard to job satisfaction have become more uniform over time. At the same time there is a large reduction in the coefficient effect associated with having a managerial or supervisory position. This may reflect the greater expectations that women in these more senior roles have compared to two decades previously.

5. Conclusion

While a substantial literature has explored the paradox of the contented female worker, we suggest that the contented female worker may well have vanished by 2012. The raw gender difference in job satisfaction and the unexplained gender difference in job satisfaction shrunk in the 1990s and again in the late 2000s and early 2010s. By the end of our time series, both were essentially zero. Critically this happens for the 1991 cohort as it ages. The finding by Clark that older women in 1991 had a particularly high level of job satisfaction appears to be a vintage effect. As the younger women of 1991 aged, their job satisfaction decreased rather

than increased. Moreover, the younger women of the later part of the survey enter without any elevation in job satisfaction relative to men.

Limiting the focus to women we find a decline in job satisfaction generated entirely by differences in coefficients. Women evaluate jobs differently in 2012 than in 1991. If anything, there is modest evidence from both the over-time comparison and male-female comparison that the characteristics of women's jobs have improved modestly even as they evaluate them more harshly. We find this harsher evaluation consistent with the original claim by Clark that women of the early 1990s had lower expectations from their work life than did men and that this explained the initial paradox. Clark suggested that greater experience would cause women to have more realistic expectations that were more similar to those of men. When this happened, job satisfaction would be the same and, indeed, that parity seems to have occurred.

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TABLE 1: Job Satisfaction, Ordered Probit Average Effects

VARIABLES	(1) I 1991 jobsat	(2) II 1991 jobsat	(3) III 2008 jobsat	(4) IV 2008 jobsat	(9) V US4 jobsat	(10) VI US4 jobsat
female	0.305***	0.234***	0.162***	0.1000***	0.023	0.00861
	(0.034)	(0.046)	(0.030)	(0.038)	(0.037)	(0.049)
age		-0.0505***		-0.0218**		-0.0339**
		(0.011)		(0.010)		(0.014)
Age^2		0.000747***		0.000287**		0.000388**
		(0.000145)		(0.000126)		(0.000164)
Tenure		-0.0001		0.0005		
		(0.0009)		(0.0010)		
Married		0.0739*		0.0375		-0.00179
		(0.0426)		(0.0343)		(0.476)
Dep Child		0.0590		-0.00902		0.0761
		(0.0627)		(0.0518)		(0.0577)
A-Level		-0.254***		-0.0448		0.0355
		(0.0467)		(0.0394)		(0.0541)
Diploma		-0.203***		-0.0421		
		(0.0673)		(0.0584)		
Degree +		-0.439***		-0.113**		-0.0277
		(0.0627)		(0.0458)		(0.0439)
Ln(pay)		0.0470*		0.0721***		0.0215
		(0.0250)		(0.0221)		(0.0295)
Hours		-0.00809***		-0.00828***		0.00300
		(0.00215)		(0.00218)		(0.00269)
Overtime		4.28e-05		-0.00253		0.00265
		(0.00287)		(0.00278)		(0.00317)
Union		-0.0831**		-0.0796**		-0.0998**
		(0.0411)		(0.0377)		(0.0462)
Public Sector		-0.117*		0.0666		0.195***
		(0.0607)		(0.0537)		(0.0609)
Observations	3,927	3,927	5,039	5,039	3,129	3,129

Model 2-4 include controls for occupation, industry, firm size, temporary contracts, managerial/supervisory role and promotion opportunities. Robust standard errors in Parentheses *** p<0.01, ** p<0.05, * p<0.1

TABLE 2: Changes in the Female Job Satisfaction by Domain, Ordered Probit Estiamtes, BHPS

VARIABLES	(1) Pay	(2) Security	(3) Hours	(4) Work
1991	0.358***	0.140*	0.0329	0.248***
	(0.0798)	(0.0808)	(0.0708)	(0.0636)
2008	0.0857**	0.0416	-0.0546*	0.0806***
	(0.0333)	(0.0323)	(0.0309)	(0.0298)

All controls as per Model (2) in Table 1. ***,**,* indicate statistical significance at the 1%, 5% and 10% level respectively. Robust standard errors clustered at the individual level in parentheses.

TABLE 3: The Evolution of the Male-Female Job Satisfaction Gap, Ordered Probit Average Effects, BHPS/US 1991-2012

	(1)	(2)
Female	0.254***	0.301***
	(0.0277)	(0.0374)
Year	-0.00351***	-0.0156***
	(0.00134)	(0.00444)
$Year^2$		0.000550***
		(0.000189)
Female * Year	-0.0117***	-0.0230***
	(0.00176)	(0.00633)
$(Female * Year)^2$		0.000501*
		(0.000266)
Observations	86,840	86,840

All controls as per Model (2) in Table 1. ***,**,* indicate statistical significance at the 1%, 5% and 10% level respectively. Robust standard errors clustered at the individual level in parentheses.

TABLE 4 – Cohort Effects & Tracking the Clark Sample, Ordered Probit Estimates

	(1) 1991 matched	(2) Clark Sample in 2008	(3) Clark Sample US (wave 2-4)
Female	0.155**	0.053	0.054
	(0.078)	(0.065)	(0.074)
Observations	1,408	1,424	2,537

Robust standard errors in parentheses. ***,**,* indicate statistical significance at the 1%, 5% and 10% level respectively. All controls as per Model (2) in Table 1. Column (1) is only those individuals observed in both 1991 and 2008; Estimates for 1991. Column (2) individuals observed in 1991; Estimates for 2008. Column (3) individuals observed in 1991; Estimates for Understanding Society waves 2 through 4.

Table 5: The Gender Satisfaction Gap, Age Heterogeneity Estimates.

	(1)	(2)	(3)	(4)	(5)	(6)
	1991		2008		US Wave 4	
	≤35yrs	>35yrs	≤35yrs	>35yrs	≤35yrs	>35yrs
Female	0.178***	0.237***	0.0792	0.0638	0.0219	0.00197
	(0.0619)	(0.0699)	(0.0597)	(0.0500)	(0.0870)	(0.0604)
Observations	1,948	1,979	1,932	3,107	1,010	2,119

All controls as per Model (2) in Table 1. ***,**,* indicate statistical significance at the 1%, 5% and 10% level respectively.

Table 6 – Linear Decompositions of Gender Job Satisfaction Decompositions.

	OLS		
	1991	2008	2012
Gap (female-male)	0.401	0.156	0.017
Characteristics	-0.079(-19.6%)	0.046(29.8%)	0.058(333.7%)
Coefficients	0.480(119.6%)	0.109(70.2%)	-0.040(-233.7%)

Estimates generated from OLS estimates with all controls as per Model (2) in Table 1. These are reported as appendix table A2.

Table 7: Detailed Decomposition Results, 1991 and 2012

	1991		2012	
	Characteristics	Coefficients	Characteristics	Coefficients
Age	0.072	0.961	0.035	0.253
Age Sqr	-0.099	-0.386	-0.042	-0.008
Married	-0.003	0.033	0.000	-0.002
Dependent Child	-0.075	0.101	0.040	0.007
A Level	0.017	-0.012	0.000	0.013
Degree or higher	0.008	-0.046	0.000	0.003
Ln(pay)	-0.060	-0.645	-0.004	-0.815
Normal Hours	0.072	-0.396	-0.042	-0.005
Normal Overtime	-0.010	0.044	-0.002	0.001
Union Coverage	0.003	-0.020	-0.011	-0.024
Public Sector	-0.010	0.038	0.055	0.051
Temporary Contract	0.004	0.001	0.001	-0.011
Manager/Supervisor	-0.014	0.032	-0.003	-0.054
Firm Size 50-99	-0.001	-0.019	-0.002	-0.006
Size 100-499	0.009	-0.075	0.005	-0.036
Size 500+	0.014	0.007	0.005	-0.002
Industry Total	0.046	-0.034	-0.022	-0.084
Occupation Total	-0.049	0.117	0.049	0.078
Regional Total	-0.004	0.027	-0.003	-0.049
Constant	0.000	0.753	0.000	0.648

FIGURE 1 – Job satisfaction, Males and Females 1991-2012, BHPS and US
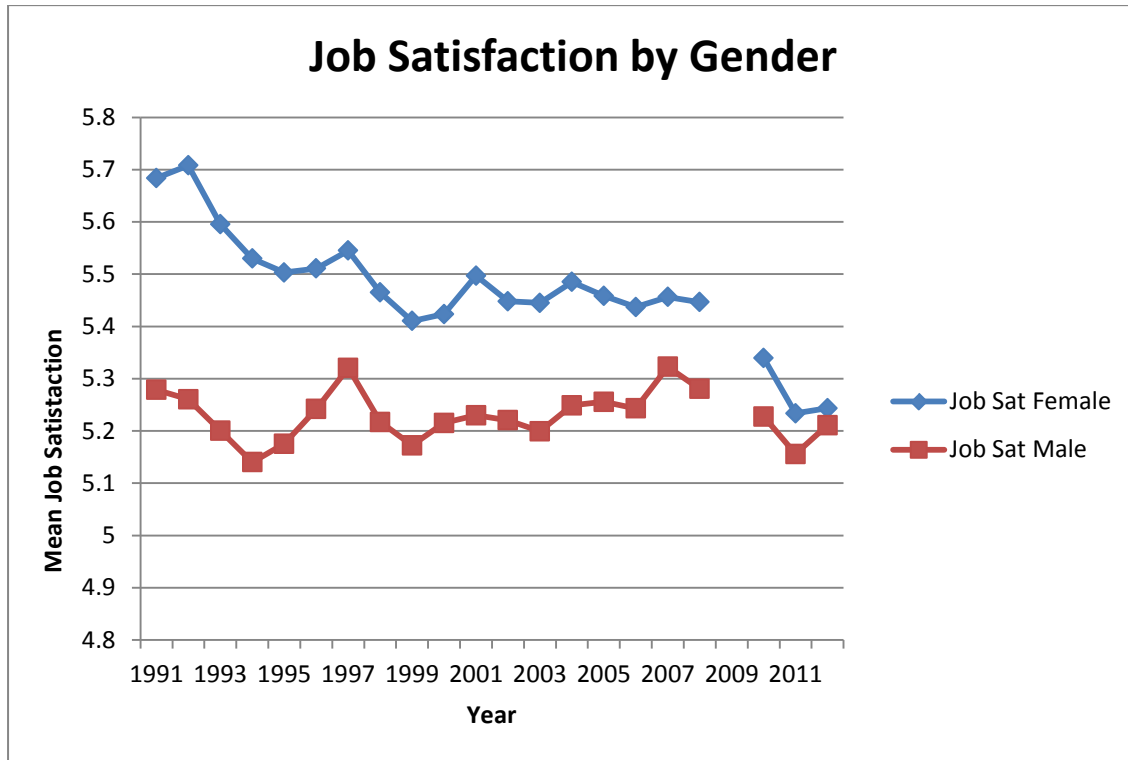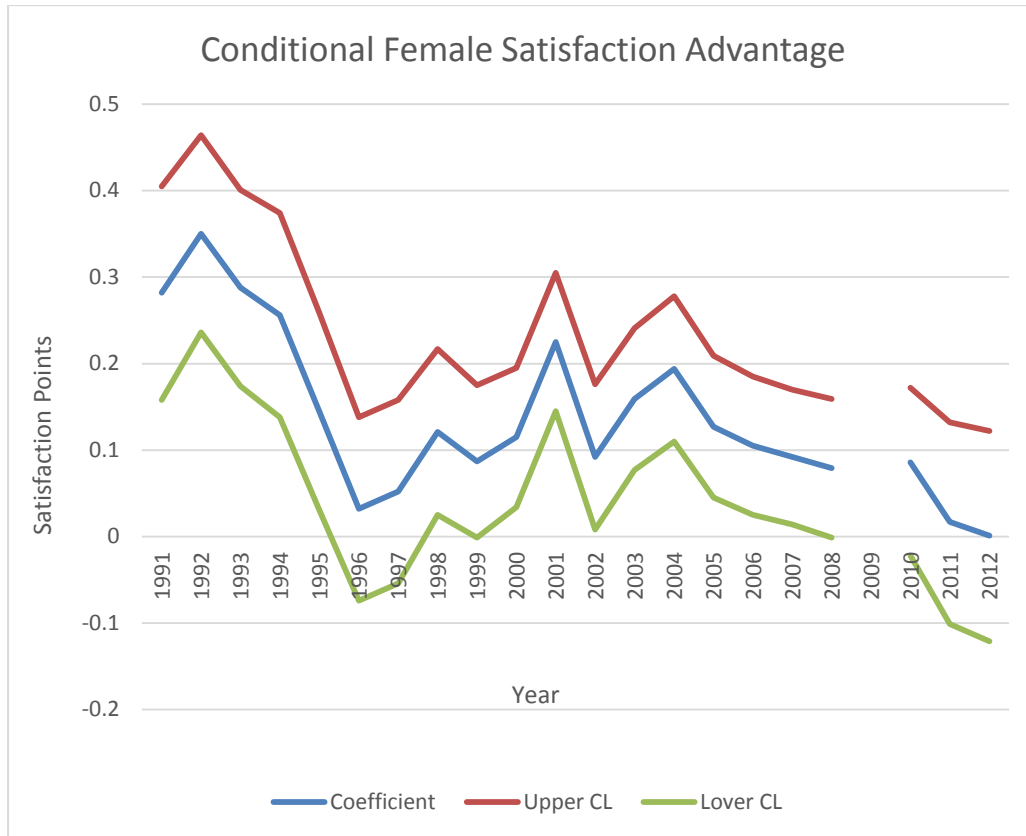

Job Satisfaction by Gender

FIGURE 2 – Estimated Unexplained Gender Gap in Satisfaction 1991-2012, BHPS and US

The coefficient from a linear regression and the estimated 95 percent confidence interval based on specifications that include all controls from column 2 of Table 1.

Appendix Table 1, 1991, 2008 and 2012, Summary Statistics

	1991		2008		2012	
	Female	Male	Female	Male	Female	Male
Age	36.10	36.93	39.05	39.74	40.70	41.55
Married	0.61	0.64	0.52	0.53	0.00	0.00
Dependent Child	0.28	0.00	0.29	0.01	0.42	0.01
A Level	0.15	0.21	0.22	0.25	0.22	0.22
Degree or higher	0.10	0.12	0.22	0.22	0.35	0.36
Ln(pay)	5.68	6.10	6.78	6.99	6.91	7.21
Normal Hours	31.32	39.87	31.52	38.75	30.80	38.34
Normal Overtime	2.45	5.51	2.78	4.15	3.43	4.24
Union Coverage	0.36	0.42	0.36	0.27	0.38	0.28
Public Sector	0.35	0.21	0.41	0.20	0.50	0.26
Temporary Contract	0.04	0.02	0.03	0.02	0.05	0.04
Manager/Supervisor	0.33	0.42	0.35	0.42	0.37	0.44
Firm Size 50-99	0.27	0.26	0.27	0.27	0.27	0.25
Size 100-499	0.22	0.27	0.20	0.25	0.22	0.24
Size 500+	0.14	0.20	0.19	0.19	0.19	0.22
Observations	1,886	2,041	2,659	2,380	1,625	1,504

Appendix Table A2 OLS estimates of job satisfaction by gender, 1991, 2008 and 2012

	1991		2008		2012	
	female	male	female	male	female	male
Age	-0.0734***	-0.0998***	-0.00308	-0.0254*	-0.0384	-0.0445**
	(0.0238)	(0.0215)	(0.0162)	(0.0144)	(0.0269)	(0.0218)
Age^2	0.00106***	0.00132***	9.09e-06	0.000316*	0.000467	0.000471*
	(0.000318)	(0.000265)	(0.000208)	(0.000173)	(0.000340)	(0.000261)
Married	0.120	0.0672	0.0690	-0.0167	-0.688	0.108
	(0.0812)	(0.0873)	(0.0510)	(0.0555)	(0.796)	(0.603)
Dependent Child	0.0827	-0.601	-0.0511	-0.119	0.112	0.0812
	(0.0898)	(0.549)	(0.0598)	(0.324)	(0.0832)	(0.300)
A Level	-0.326***	-0.257***	0.0507	-0.102*	0.0589	0.000822
	(0.0985)	(0.0888)	(0.0578)	(0.0585)	(0.0940)	(0.0950)
Degree or Higher	-0.741***	-0.321**	-0.0534	-0.0971	-0.0381	-0.0463
	(0.128)	(0.130)	(0.0660)	(0.0709)	(0.0805)	(0.0801)
Ln(Pay)	0.0872*	0.197***	0.0706**	0.121***	-0.0405	0.0748
	(0.0466)	(0.0508)	(0.0357)	(0.0306)	(0.0568)	(0.0457)
Normal Hours	-0.0142***	-0.00302	-0.00927***	-0.00452	0.00551	0.00566
	(0.00421)	(0.00446)	(0.00317)	(0.00344)	(0.00458)	(0.00466)
Overtime	0.00922	-0.00201	-0.00771	0.00329	0.00293	0.00258
	(0.00751)	(0.00484)	(0.00473)	(0.00382)	(0.00595)	(0.00554)
Union	-0.0675	-0.0152	-0.0461	-0.0271	-0.139*	-0.0669
	(0.0812)	(0.0843)	(0.0569)	(0.0618)	(0.0837)	(0.0874)
Public Sector	-0.00436	-0.138	0.0262	0.0917	0.303***	0.166
	(0.114)	(0.127)	(0.0707)	(0.0947)	(0.101)	(0.123)
Temporary Job	0.304	0.256	-0.225*	0.0193	-0.0287	0.222
	(0.185)	(0.239)	(0.127)	(0.160)	(0.163)	(0.178)
Manager/Supervisor	0.192**	0.107	0.0466	-0.00317	-0.0228	0.110
	(0.0836)	(0.0850)	(0.0546)	(0.0590)	(0.0821)	(0.0842)
Firm Size 50-99	-0.105	-0.0345	-0.0750	-0.0139	-0.149	-0.125
	(0.0850)	(0.0966)	(0.0589)	(0.0653)	(0.0909)	(0.0954)
Size 100-499	-0.347***	-0.0390	-0.101	-0.177**	-0.260***	-0.106
	(0.0938)	(0.100)	(0.0652)	(0.0688)	(0.0972)	(0.0984)
Size 500+	-0.198*	-0.238**	-0.102	-0.0873	-0.172	-0.162
	(0.113)	(0.110)	(0.0686)	(0.0761)	(0.105)	(0.104)
Constant	6.649***	5.895***	5.844***	5.525***	5.886***	5.238***
	(0.678)	(0.524)	(0.469)	(0.431)	(0.601)	(0.544)
Observations	1,886	2,041	2,659	2,380	1,625	1,504
R-squared	0.084	0.060	0.023	0.045	0.035	0.047

All models include controls for industry, occupation and region. Standard errors in parentheses ***,**,* indicate statistical significance at the 1%, 5% and 10% level, respectively